

OBSERVATIONS
ON THE
EPIDEMIC CATARRHAL FEVER
OR
INFLUENZA,
OF 1803.

To which are subjoined,

HISTORICAL ABSTRACTS

CONCERNING THE CATARRHAL FEVERS OF

1762, 1775, and 1782,

AND

Communications from various Correspondents.

SECOND EDITION.

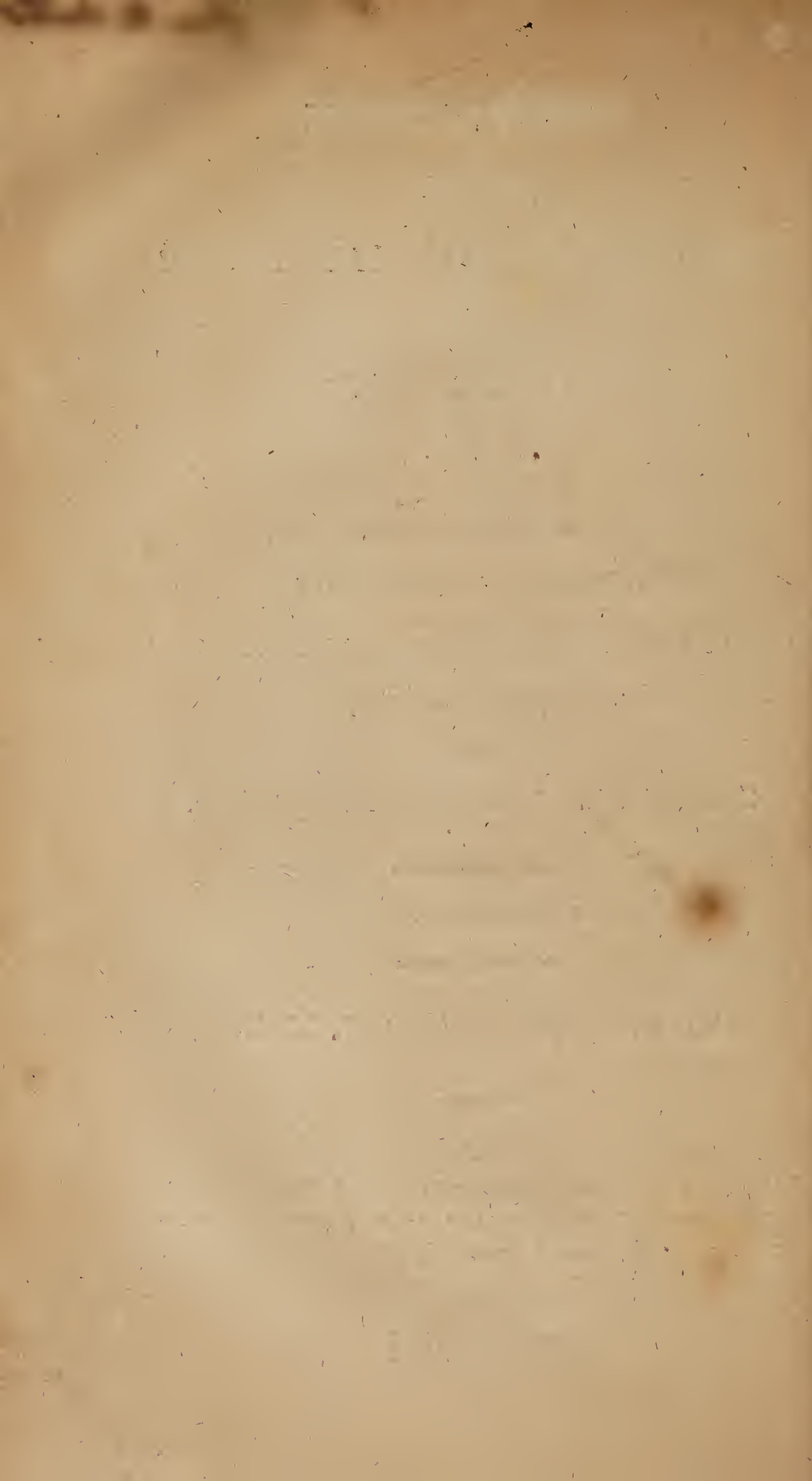
BY RICHARD PEARSON, M. D.

LONDON:

PRINTED BY C. AND R. BALDWIN, NEW BRIDGE-STREET,
AND SOLD BY THEM;—ALSO BY L. B. SEELEY, AVE-
MARIA-LANE; AND J. CALLOW, CROWN-COURT, SOHO.

1803.

[Price 1s. 6d.]





ADVERTISEMENT.

To acquire a just and accurate knowledge of any disorder, but more especially of an Epidemic Disorder, it is necessary to examine diligently its essential symptoms, and to watch the changes produced by different and opposite modes of treatment. These*

* Hence he has considered as accidental modifications of one and the same Epidemic, various affections which others have described as distinct diseases of the last spring.—Existimem dubio illum tramite errare, atque incerto duci filo, qui in februm curatione non continenter ob oculos habet *anni constitutionem*, quatenus huic aut alteri morbo epidemicè producendo favet cæterisque morbis omnibus unà concurrentibus in ejus similitudinem ac formam detorquendis. Sydenham. Op. Sect. v. cap. 5.

With whatever disorder the Influenza was combined, whatsoever mask it put on, its real nature was soon discoverable by the peculiar appearance of the tongue, by the state of the pulse, by the remarkable degree of lassitude, and by the diurnal remissions and nocturnal exacerbations of the fever.

objects the Author has kept in view ever since the first appearance of the Catarrhal Fever in this metropolis and neighbourhood. And thus he thinks he has been enabled to ascertain what is generally salutary, and generally hurtful in this complaint.

Agreeably to the intention announced in the first Edition, he has prosecuted his observations and inquiries down to the present date; and has thrown most of the notes into a separate section, that, in the perusal of the descriptive part, the reader's attention might not be interrupted by the obtrusion of speculative and miscellaneous topics.

Abstracts from the histories of the Catarrhal Fevers of 1762, 1775, and 1782, have been subjoined in order that by comparing their symptoms with those of the Catarrhal Fever which has lately been so prevalent, the reader may have an opportunity of tracing the general similitude, as well as the particular shades of difference between each of these Epidemics. And to this edition are added the answers with which the Author has been favored by several practitioners of eminence in different parts of the kingdom, to whom he had addressed a set of

queries on the subject. This correspondence, he may venture to assert, will be found to contain much valuable information relative to the progress, nature, and treatment of the late Epidemic.

Bloomsbury-square,

May 2d, 1803.

CONTENTS.

SECTION I. *Of the Catarrhal Fever as it appeared in London in the months of February, March, and April 1803.* page 1.

SECTION II. *Notes and Observations.* 16.

SECTION III. *Historical Abstracts concerning the Catarrhal Fevers of 1762, 1775, and 1782.* . 22.

SECTION IV. *Communications from various Correspondents.* 31.

SECTION I.

Of the Epidemic Catarrhal Fever, as it appeared in London in the Months of February, March and April, 1803.

THE year 1762 was remarkable for a Catarrhal Fever, of which we have an elegant description by Sir George Baker. A similar epidemic prevailed in 1775, and is described in the 6th Volume of the Medical Observations and Inquiries; and respecting that which was so general in 1782, the fullest information is to be found in the 1st Volume of the Medical Communications, in the 9th Volume of Dr. Duncan's Medical Commentaries, and in the 3d Volume of Dr. Simmons's Medical Journal.*

On comparing the symptoms of these several epidemics with one another, and with the symptoms by which the present Catarrhal Fever is characterized; it will be seen that, in their principal

* Also in a separate tract, by Dr. Falconer, of Bath. We purposely avoid multiplying references; otherwise a long catalogue of foreign and domestic writers on this subject might easily be drawn out.

features, they bear the closest resemblance; insomuch that the history of one becomes, in a great measure, the history of all.¹ Instead, therefore, of entering into a minute and circumstantial detail of the present Influenza, we shall content ourselves with describing its most general form, referring to the authorities before-mentioned for particulars concerning the endless varieties and anomalies which these epidemics are wont to exhibit.

~ The Catarrhal Fever, or Influenza, which has lately spread itself over the whole metropolis, and has since made its way to almost every part of the kingdom,² first shewed itself here about the middle of February, when a damp and mild state of the atmosphere had succeeded to severe cold. This again was followed by frost and keen northerly and easterly winds during the first part of March, the latter part of which was very warm. In the beginning of April the weather was mild and rainy. In the middle dry and fine, the noon-days remarkably warm, but the mornings and evenings cold. Wind east. The latter part of the month was cloudy, windy and very cold, with showers of rain and hail. Wind westerly and northerly. The last week of this month was unusually cold. This

¹ See Note (A.)

² See Note (B.)

severe weather occasioned a great aggravation of the pulmonary symptoms.*

Like all former Catarrhal Epidemics, the present Influenza has exhibited various degrees of morbid affection; having been in some instances so slight as not to incapacitate persons from continuing their ordinary occupations and pursuits, and scarcely to require the aid of medicine; while in others the attack has been of such a malignant nature, as to endanger and even destroy life.

The following is its most frequent mode of attack. After some alternations of chilliness and heat, the patient is seized with a heaviness or pain of the head, with sneezing, wateriness of

* Between these epidemics, and the condition of the atmosphere, there seems to be a connexion different from that which depends upon a mere alteration of temperature, or of dryness and moisture; but what that peculiar connexion is, we shall not attempt to explain. Yet it is proper to notice the changes of temperature, and other sensible qualities of the atmosphere, as giving rise to the predominance of a certain set of symptoms at one time more than another. Thus in frosty weather, and during northerly and easterly winds, the catarrhal, and peripneumonic affection, will be most conspicuous; while in warm weather, and during westerly and southerly winds, the head-ach, sickness, disordered bowels, glandular swellings, &c. will constitute the most urgent symptoms. All these modifications have been observed, during the changes of the weather, in the present Epidemic.

the eyes,* hoarseness and cough. These symptoms come on in the order here stated. In the course of a few hours the headach increases, the skin becomes hot, with pains in the back and limbs,³ or transitory stitches across the chest. The tongue is white; the pulse quick or frequent, and for the most part soft. There is more or less of sickness at the stomach, and sometimes vomiting. The bowels are generally costive; and considerable uneasiness, or even a distressing pain, is felt in some part of the abdomen in many instances.⁴ By the 2d or 3d night, the cough and fever become greatly aggravated. The former, viz. the cough, is strong and incessant, sometimes dry, but often accompanied (even at its first coming on) with an expectoration of thin, sharp mucus: The latter, viz. the fever, is attended with increased heat, and with extreme restlessness and anxiety. There is also some confusion of the head. At this time the pulse is often from 110 to 120. In the morning there is a considerable remission of the febrile symptoms; but the cough (with more or less dyspnœa) still continues urgent, and the patient complains of excessive languor and dejection of spirits.

After the 3d or 5th day, where early perspi-

* In some, an inflammatory appearance of the vessels of the tunica conjunctiva, and a puffy swelling of the eyelids.

³ See Note (c.)

⁴ See Note (d.)

rations have come on, or sufficient evacuations have been procured by the stomach and bowels, the fever declines; and although the cough continues, the expectoration is more free, the sputum being of a thicker consistence, and milder quality. The urine, which before was high-coloured and clear, now becomes turbid, or throws down a sediment. In other instances the cough continues very troublesome for many days, or even some weeks, after the abatement or cessation of the fever, and goes off very tediously without any remarkable degree of expectoration.

The lassitude and depression of spirits, with restless nights, harass the patients for many days after the decline of the fever; which indeed, in several instances, does not entirely go off after the 5th day, but becomes intermittent, the patient feeling himself worse every other day.

Such is the most common form of this epidemic. Its modifications, however, as we have before observed, are extremely numerous; so that in some there is a violent headach, with little catarrhal affection; in others a sore throat; in others a peripneumonic condition; and in others a disordered state of the stomach and bowels. In several instances, swellings of the parotid, maxillary, and cervical glands have been observed;

* The stools are more or less bilious in all instances. In some they are of a very dark colour, and extremely offensive.

especially during the month of April; i. e. towards the decline of the epidemic. These, and other varieties, have been particularly noticed in the histories of former epidemic catarrhal fevers, to which, (in order to avoid repetition) the reader is referred.—Relapses were not uncommon. In such cases the mucous covering of the tongue was generally yellow or brown, (not white, as in the first attack) and the whole condition of the patient resembled that of low fever.

From this sketch of the disorder, it is evident that this epidemic differs from a common catarrh, in the *degree and kind of fever* with which it is accompanied; and that, as it is the fever which constitutes the essence of this disease, and not the catarrh, it should be denominated *Epidemic Catarrhal Fever*, or *SYNOCHUS Catarrhalis*, and not simply Epidemic Catarrh.* Its infectious nature can scarcely be doubted; but how long its contagion is capable of being applied before it takes effect, and what are the circumstances most favourable to its action, are points which have not yet been duly investigated.⁵

As it is the fever which constitutes the essence of this disease, our first attention should be directed to it, and not to the cough (except when

* In certain situations, the fever degenerates into the typhus kind.

⁵ See Note (E.)

it is accompanied with pneumonic inflammation); otherwise, by prescribing only for one of its symptoms, we shall make but little impression upon the general morbid affection.

We are not therefore to begin the cure with pectoral medicines, but with such remedies as are capable of acting upon the system at large, through the medium of the stomach and intestinal canal. Such are emetics, and mercurial and antimonial cathartics.

A bad taste in the mouth, oppression about the epigastric region, and nausea, indicate the use of an emetic; which, even where some of these symptoms are wanting, should seldom be omitted. But, whether an emetic be administered or not, the bowels should be moved by a dose of calomel, joined with about half its weight of the Pulv. Antimonialis Ph. Lond.

If, after some hours, this medicine shall not appear to be sufficiently active, its operation should be promoted by a solution of the kali tartarisatum, magnesia vitriolata, or some other neutral salt; the patient all the while diluting freely with some tepid mucilaginous drink.

Before the purgative operation takes place, this combination of calomel and antimonial powder produces a marked effect upon the skin, and a general diaphoresis breaks out: Nor does this appear to be checked in any considerable degree

by the subsequent discharge from the bowels; before the coming on of which, a pediluvium may sometimes be used with advantage.

As the calomel and antimonial powder produce their effect, the headach, anxiety, and heat of the skin, abate: The cough, however, and dyspnœa, are little altered, and require the application of a blister. They are also further relieved by draughts composed of aqua ammoniæ acetatæ, and æther, or Sp. Æth. nitros. mixed with a proper quantity of common water, or mint water.*

After evacuations by stool have been procured, opiates afford relief; but they should be prescribed in very small quantities; a full dose producing great mischief in this stage of the disorder. The syrupus papav. alb. is a convenient preparation. Of this one drachm may be given to an adult, joined with 5 or 6 drops of the tinctura opii. To young persons a double quantity of the syrup may be given, without the opiate tincture.†

* The inhalation of æther-vapour is not so beneficial in this epidemic as it is in simple catarrh. Where, however, the cough is dry, and the dyspnœa urgent, without being accompanied with pneumonic inflammation, it may be resorted to with advantage.

† The dose of the opiate tincture may be increased towards the decline of the fever; but, even in the advanced stage of the complaint, it will seldom be proper to exceed 15 drops. I wish to call the attention of practitioners to the difference between small and large doses of opium in this epidemic.

The day after the operation of the mercurial and antimonial purge, the patient should drink freely of a solution of crystals of tartar in common water; unless (a circumstance which we have rarely observed in the present epidemic) a loose state of the bowels should come on.*

The solution of this acidulous salt (the crystals of tartar) forms a pleasant and refreshing beverage, and, along with its beneficial action upon the bowels, promotes a flow of urine; a mode of operation which contributes in no small degree to the removal of the fever.

Where the bowels are not readily acted upon by the medicines above-mentioned, it will be necessary to have recourse to clysters; which, indeed, are almost indispensable in the case of children.

In the course of this disorder, the calomel should be repeated 2 or 3 times, without the antimonial,† and in smaller doses.

To promote expectoration, squill, in some form or other, will now be proper; provided the heat of the skin and frequency of the pulse

* In that case the spontaneous evacuation is not to be checked. Plentiful dilution, with blisters, and mild opiates, will form the whole of the cure.

† Without the antimonial, if there be no peripneumonic affection; if there be, either with it or with small doses of ipecacuanha.

shall have been greatly abated: i. e. provided the fever shall, for the most part, have subsided. It may be joined with the aq. ammon. acetat. and Sp. Æther. nitros; but oily medicines, and the common pectoral emulsions, are of very little use. Mucilages, however, such as gum arabic or tagacanth, may, in some instances, be advantageously joined with the squill. Also, small doses of ipecacuanha.

In the beginning of the attack a moisture upon the skin is doubtless salutary; but after the second or third day, it is not desirable to excite a perspiration by keeping the patient in bed, and giving him strong sudorific medicines and warm liquors, as in the case of a common catarrh. The heat, which accompanies such a sweating process, aggravates the fever, and the forced diaphoresis is constantly followed by increased languor and dejection of spirits. The recovery, under such circumstances, is extremely tedious.

Paying less attention, therefore, to the catarrhal symptoms than to the general febrile affection, we should avoid all accumulation of external heat; and after the 3d day, (except in those few cases where violent pneumonic inflammation occurs) direct the patient to sit out of bed, allowing him *cool* drinks, and taking care to have the room kept *cool*, and properly

ventilated, especially when the temperature of the atmosphere exceeds 45 or 50° of Fahrenheit's thermometer.*

Whether the fever goes off entirely, or puts on an intermittent form, great languor and depression of spirits, with want of appetite, remain for many days. Contrary to what is observed in other cases of febrile debility, the Peruvian bark and mineral acids, are here of no avail. They even do harm. But infusions of the simple bitters, or a solution of myrrh, may be prescribed with good effect, especially when joined with the acetated kali, or prepared natron. This last combination agrees best with young subjects.

At this period a less restrained use of opium is admissible, in order to counteract the disturbed nights.

During the convalescence, the bowels are liable

* As the weather grew warmer, the symptoms of the Influenza in 1782, were more severe, and the recoveries more tedious: And the inhabitants of low and close situations had the disease worse than the inhabitants of high ones. In some hospital-patients, it wore a malignant aspect. See the account drawn up by Dr. Gray, from various correspondents, and inserted in the 1st Volume of the Medical Communications. In like manner, it is recorded by Sir G. Baker (on the authority of Dr. Petrie) that in the neighbourhood of Lincoln the epidemic of 1762 raged with unusual violence in low situations; that is, in places where a due ventilation was wanting. (Baker de Catarrho epidemico.) And in the present epidemic, persons employed in heated and crowded workshops have had the disorder in its severest forms.

to occasional irregularity ; which, if it incline to costiveness, will require a repetition of the calomel, in a smaller dose, with the addition of a grain or two of aloes : or, the *Pil. Aloes cum Myrrha* may in some cases be given without the calomel.

Throughout the whole progress of the disorder, the diet should consist of mucilaginous vegetable decoctions, and of animal jellies, flavoured with subacid vegetable juices. Broths should not be allowed during the feverish state, as they tend to keep up an unsalutary perspiration, and never fail to increase the headach, nausea, and languor.

When the disease is complicated with pulmonary inflammation, the same remedies are to be employed (the lancet, however, not quite so freely,) as in the case of a simple peripneumony; but after the removal of the local inflammation, calomel should be given in small doses, together with the saline diuretics before-mentioned, in order to counteract the morbid condition of the system at large. It is to be remarked, however, that free and brisk purging is not so well suited to the cases of this fever which are complicated with pneumonic inflammation, as to the other forms of the epidemic;* but early and gentle evacuations by the

* In like manner brisk and copious purging was not suited to very old people nor to consumptive subjects. In these a gentle and moderate catharsis answered best.

bowels are serviceable, even in the first-mentioned cases. When venesection is judged necessary, it should be resorted to in the beginning of the attack ; for after three or four days have elapsed, the period for employing the lancet with advantage, or perhaps with safety, is past. A middle aged patient, who, in the month of March last, had the catarrhal fever complicated with pneumonia and diaphragmitis, was bled on the 4th day of the disorder, and again on the following day. The blood exhibited a strong buffy coat; but the case terminated fatally on the 6th day. Those who have seen much of this epidemic will easily bring to their recollection many similar instances of the unsuccessful employment of bloodletting in the advanced stage, of the disorder, though accompanied with symptoms of local inflammation.⁶

⁶ See note (F.)


RECAPITULATION OF THE NOCENTIA

THINGS HURTFUL.

1. BLEEDING, except in those few cases where there is evident pneumonic inflammation; and even then, unless employed in the beginning.
2. FORCING OUT SWEATS by accumulation of external heat and strong sudorifics.
3. EMULSIONS, and other oily pectoral medicines.
4. LARGE DOSES OF OPIUM, in the beginning of the disorder.
5. A CLOSE AND UNVENTILATED ROOM.
6. BROTHS and warm animal decoctions, while the febrile state subsists.
7. The PERUVIAN BARK, with very few exceptions, even in the advanced stage of the disorder.

AND JUVANTIA IN THIS EPIDEMIC.

THINGS USEFUL.

1. THAT DEGREE OF DIAPHORESIS, which either comes on spontaneously, or is consequent to the mercurial and antimonial medicine given at the beginning of the attack.
 2. COPIOUS EVACUATIONS by stool.
 3. BLISTERS and ÆTHER, or Sp. Æth. nitros.
 4. SMALL DOSES OF OPIUM (after the bowels have been acted upon) gradually increased as the fever declines.
 5. PROMOTING A FLOW OF URINE by a solution of crystals of tartar.
 6. A COOL AND WELL VENTILATED room.
 7. INFUSIONS of the SIMPLE BITTERS, joined with the acetated kali or prepared natron.
- 

SECTION II.

Notes and Observations.

(A) THE Catarrhal Fever of 1762 appears to have been of a more inflammatory character than the present. On the other hand, the Influenza of 1782, which prevailed later in the year, viz. in the months of May and June, had, in general, less of the catarrhal affection, and more of low fever, than the present epidemic.

(B) The Influenza of 1762, which shewed itself in London in the beginning of April, did not reach Edinburgh till the beginning of May, nor some parts of Cumberland till the end of June.

The Influenza of 1775, which began in London in the month of October, spread to Dorchester, Exeter, Birmingham, York, Chester and Worcester, in the month of November. It lasted 4 or 5 weeks in each place. [The Epidemic of this year has lasted longer.]

The Influenza of 1782, first appeared in London about the middle of May; at Exeter at the end of that month; at Newcastle upon Tyne and at Edinburgh, in the beginning of June.

The Influenza of the present year (1803) began

in London about the middle of February. It appeared at Gosport at the end of the same month; at Shrewsbury on the 20th of February, but was not general there till the beginning of March; at Stourport, in the beginning of March; at Birmingham and Litchfield, the second week in March; at Bristol, about the same time. See answers from correspondents, Section IV.

(c) In the majority of cases the pains of the limbs have borne more affinity to those which often accompany typhus, than to those which are characteristic of acute rheumatism; yet an author who has lately written on the prevailing disorders, has considered them as constituting the last mentioned disease, and has directed them to be treated accordingly by blood-letting, pulv. ipecacuanhæ compos. &c. &c.

(d) In several bad cases a fixed pain (aggravated by pressure) in the *left* hypochondrium, and extending from thence transversely in the direction of the diaphragm, as far as, or near to the pit of the stomach, was a prominent symptom. In one case of this description, there was little doubt of an inflammatory affection of the peritoneal coating of the diaphragm, and perhaps of the stomach also. In another instance, where the pain in the left side of the abdomen was more circum-

scribed, there was reason to suspect a similar affection of the spleen. In some the seat of the pain and irritation was near the umbilical region, partaking of the nature of colic, and being accompanied with flatulency.

(E) A variable state of the weather has been supposed by some to be the exciting cause; but if this were the case, catarrhal fevers or influenzas should appear epidemically every winter or spring; for, in this climate at least, the weather is notoriously changeable at those seasons of the year. But there is one circumstance which puts it beyond a doubt that sudden alternations of heat and cold, wet and dry, are not the efficient cause of this disorder; (though they may modify and favor its action as they do modify and favor the action of other epidemics :) I mean its existence at a time of the year when such variations of the atmosphere do not take place. The influenza of 1782 was prevalent in many parts of England in the months of June and July, when the weather was such as is usual in our finest summers: And one of the most remarkable epidemics of this sort made its appearance in Germany and other parts of the continent of Europe, in the autumn of 1580 (See Sennertus de Febribus, Lib. iv. Cap. 17). With more appearance of

probability has the origin of this Epidemic been referred to specific miasmata diffused through the lower regions of the atmosphere. It is difficult, however, to conceive how the air should become impregnated with these miasmata in such quantity as to render it (the air) capable of exciting the disease over a tract of the globe containing many thousand square miles (for to such extent did the Catarrhal Fever of 1782 prevail); and why, if an atmospheric agency of this sort were the only cause, the disorder should not shew itself in all places within the distance of a few hundred miles at one and the same time, and not progressively at different periods. But, though it should be granted that the disease originates from miasmata existing in the lower currents of the atmosphere; it by no means follows that it is not kept up and rendered epidemic by personal intercourse, i. e. by effluvia emitted from the bodies of the sick, particularly by the breath. Intermittents, the offspring of marsh miasmata, are sometimes transferred from their native swamps and rendered epidemic even in dry and elevated situations, by the same means, viz. by contagion. (See Cleghorn and other writers on Intermittents.) If in populous towns, and in houses consisting of large families, numbers of persons are seized with the Influenza nearly about the same

time, it does not necessarily follow that it is propagated by the atmosphere alone, and not by individual, communication, or infection as well or chiefly. For, among the numbers which fall ill in different parts of the town, many must have had intercourse with others who were actually suffering under the disorder, or recovering from it: And, where several persons under the same roof are seized on the same day, it is certainly no proof that they did not infect one another; but may rather be assumed as an argument of the very active and diffusible nature of this specific contagion. One sort of contagion is quicker in its operation than another. The contagion of typhus takes a longer time to produce its effect than that of the small-pox. The scarlatina-contagion comes sooner into action in persons who have been exposed to it, than the variolous; and the influenza-contagion would appear to be the most active of all. In numerous instances I have known persons to be seized with this disorder on the 3d day after communication with others who were ill of it. The period of infection is, probably, in some instances much shorter.*

* What further tends to prove the contagious nature of these Epidemics is, that in many instances they assume the form of typhus, being accompanied with miliary and petechial eruptions, and *that they seem to be convertible into dysentery, a*

(F) Different species of inflammatory action require different modes of treatment. All simple inflammations are speedily removed by the free and well-timed use of the lancet; but those which are produced by the action of contagion combined with the action of such causes as excite simple inflammation, are not always removable by the same means. Thus venesection is not only ineffectual but generally hurtful in cases of pestilential inflammation, of erysipelatous inflammation,* and of scarlatina-inflammation. They are curable without it. I wish to discuss this subject at some length, on a future occasion. At present I have not leisure. In the mean while, this hint may serve to shew, that with the term inflammation we are not always to associate the idea of blood-letting.

disease confessedly contagious. During and after the prevalence of the Catarrhal Fever of 1743, dysenteries were very general: insomuch that Huxham suspected the latter to have originated from the former. See his *Obs. de Aëre*, Vol. ii, p. 99. In like manner the Epidemic Catarrhal Fever of 1762 was followed by an Epidemic Dysentery. See *Baker de Catarrho et Dysenteria*.

* We mean erysipelatous fever existing epidemically.

SECTION III.

*Of the Epidemic Catarrhal Fevers of 1762, 1775,
and 1782.*

As many practitioners, into whose hands this pamphlet may circulate, may not have in their possession the works referred to in the first page, containing the histories of similar preceding epidemics; we here subjoin, for the use of such readers, an abstract therefrom.

Symptoms which characterized the Epidemic Catarrhal Fever of 1762, as it appeared in London in the beginning of April. See Baker de Catarrho Epidemico.

Alternate chills and heat; a continual harassing cough, (in some at the very beginning, in others not till after the second day) with or without expectoration; lassitude; heaviness and pain about the temples and forehead; eyes inflamed, watery, not bearing the light; swellings of the eye-lids; frequent sneezing; hoarseness; a sense of heat and rawness along the whole course of the trachea, extending to the cartilago ensiformis. In others, a similar sensation extending from the

fauces to the stomach, as if the œsophagus was in like manner inflamed. Some had inflammatory angina. There was a sense of weight in the middle part of the chest, with dyspnœa; and during the violence of the cough, lacerating pains between the shoulders; also, flying pains in the limbs and sides. In some a spitting of blood; in others a slight bleeding from the nose. These symptoms were often accompanied with considerable fever, which abated during the day-time, and increased at night. In some, however, the degree of febrile affection was so trifling, as scarcely to create thirst, or take away the appetite, or prevent sleep. All had profuse sweats, which sometimes carried off the disease; at other times rendered it milder. There was no great thirst; but the tongue was, in all instances, covered with a white mucus, as if it had been besmeared with cream. Urine high-coloured (biliosa) in the beginning; in the progress of the disorder depositing a branny or lateritious sediment. In all, the lowness of spirits, and prostration of strength, were far greater than could be accounted for by the degree of morbid action. The recovery was, in numerous instances, exceedingly tedious, the cough, feverishness, and languor, continuing to harass the patients for several months. In some the disorder terminated fatally, after a long illness, in pulmonary con-

sumption. Many, after they were recovered in other respects, complained of a pain in the side, or in some part of the abdomen, which continued for a long time. Pregnant women were liable to abortion or premature parturition, on being seized with this complaint, or during their recovery from it.

In others, the attack came on, with little catarrhal or peripneumonic affection, but with violent pain of the limbs and head, lassitude, and a high degree of fever. These patients experienced great anxiety and oppression of the præcordia, similar to what happens before the appearance of exanthematous eruptions. Such eruptions, however, were very rarely observed.—The disease usually terminated about the 4th day; at which time an expectoration of thick mucus took place. It was an affair, however, of more difficulty and danger, when it appeared under the form of a true peripneumony with acute fever, as often happened. Under this form it proved fatal to such as were intemperate in their mode of living; to such as were of a full or bad habit of body; to old asthmatic people; in a word, to those who neglected the disorder in the beginning, or imprudently exposed themselves to cold and fatigue. Hence it was particularly severe and often fatal in the instance of servants and labourers.—In some instances the disorder re-

sembled a low fever ; in others it put on the form of an intermittent, with tertian periods.

The Epidemic Catarrhal Fever of 1775, which appeared in London towards the end of October, was accompanied (see Dr. Fothergill's account in Medical Observations and Inquiries, vol. VI.) by the following symptoms.

A swimming, or pain in the head ; soreness of the throat, and all over the body, with a sense of coldness, particularly in the extremities ; cough ; running at the nose ; watery eyes ; slight nausea ; a diarrhœa, in some ; more or less feverish heat ; inquietude ; pain about the chest, præcordia, and limbs ; tongue moist ; skin not remarkably hot or dry ; pulse often full, quick, and harder than might have been expected from such a temperature of the skin. Several were seized with a diarrhœa ; the stools were always black, or of a deep yellow colour, and so were those for the most part which were procured by purgative medicines. In a few days every complaint abated except the cough, which continued for some time, and was exceedingly troublesome during the fore part of the night. Those who were seized at first with very copious defluxions from the nose and fauces, or had a plentiful and spontaneous discharge of black bilious

stools, or made large quantities of high-coloured urine, or sweated profusely of their own accord, a night or two after the seizure, soonest grew well. In many instances the disease assumed the type of an intermittent towards its decline. Many who neglected themselves, and went abroad with the distemper upon them, frequently got additional colds, and brought on a fever of the most dangerous kind. A few died phrenetic. Ancient asthmatic persons were great sufferers; a peripneumonic fever gradually came on, which often terminated fatally. It likewise proved fatal to several very young children.

The same Epidemic is thus described by the late Dr. Heberden :

In some it began with a sickness and perpetual vomiting, which were the forerunners of a severe degree of this illness. In others the first symptoms were sneezing and a copious defluxion from the nose and eyes; these suffered much less, and were sooner recovered. Many complained of a hoarseness and sore throat, and of a tightness, oppression and heat of their breasts, and of feeling pain in various parts, particularly in their heads, sides and backs. Almost every one of these patients was afflicted with a racking cough, with a sense of coldness frequently returning upon them; with a failure of appetite and of sleep, and with a languor and weakness, much greater than might

have been expected from the effects of any of the other symptoms. The degree of fever was seldom great. Two persons had eruptions resembling that of a scarlet fever. In two or three young men the disorder was increased to a dangerous height, and became a true peripneumony, attended with bloody phlegm, and manifestly requiring frequent bleedings, by which they were much relieved. Towards the middle or end of this illness, a few were attacked with intolerable stitches in their sides or loins, so that for 2 or 3 days they were confined almost to the same posture; and if they were necessitated to change it, they shewed all the marks of exquisite pain. Lighter cramps in the legs and arms were not uncommon at the going off of this malady. The violence of the disease usually began to abate in 5 or 6 days.

The Epidemic Catarrhal Fever of 1782 prevailed in the months of May and June. Its symptoms, as described by Dr. Gray, from accounts transmitted by various correspondents (See Medical Communications, Vol. I.) were as follow:

Chilliness and shivering, sometimes succeeded by a hot fit, and alternating with it for some hours; languor and lassitude; sneezing; discharge from the nose and eyes; pain in the head;

cough, sometimes dry, sometimes with expectoration; inflammation of one or both eyes; oppression and tightness about the præcordia; difficulty of breathing; pain in the breast or side; pain in the loins, neck, shoulders or limbs; sense of heat and soreness in the throat and trachea; hoarseness; bleeding from the nose; spitting of blood; loss of smell or taste; nausea; flatulence.—Watery blisters about the upper parts of the body; swellings in the face and other parts, attended with considerable soreness, apparently erysipelatous; and others of a different nature, forming abscesses in various parts (sometimes in the parotid and axillary glands.) In a few instances, a very painful swelling of the abdomen seemed to constitute the most disagreeable symptoms of the disorder. A scabby eruption about the nose and lips was not uncommon; and in some cases, a miliary eruption, or one like the chicken pox, at the close of the disorder. Abscesses in the ears, in a few instances. In some the catarrhal symptoms were very slight, or entirely wanting, the disorder in those cases being like a common fever. The pain in the breast or side (which in most cases seemed symptomatic *)

* This symptom occurred in the late epidemic, and was towards the end of the complaint, frequently of a spasmodic nature. Accordingly, it has been removed by employing internally and externally the remedies adapted to spasm. This

was in some the principal complaint, and had the appearance of genuine peripneumony or pleurisy, with every mark of inflammatory diathesis. In a few of these cases the pleuritic symptoms were preceded by those of inflammatory angina; and there were observed some instances of the last-mentioned disorder, which terminated in suppuration of the tonsils.—In others there were remarked evident signs of a tendency to putrefaction, and in one case the disease seems to have put on the form of a nervous fever. The tongue was generally white, but moist; skin hot and dry in the beginning, but a perspiration usually came on before many hours were past, even where no means were used to excite it. Restless and disturbed nights, frequently with delirium, which in general did not continue long; in some cases, however, it was the most alarming symptom of the disorder. Pulse quick, but in various degrees; in the milder attacks, it did not exceed 100; in the violent forms of the disorder, it was frequently 120, or more; in the beginning it was often full, but very seldom hard; sometimes it was intermittent. The state of the bowels did not, in general, differ much from that of health;† as the weather grew warmer, the fever pain, however, should be carefully distinguished from that which is described in Section II, note (D) which is evidently inflammatory. R. P.

† In this respect there was a remarkable difference between

became remittent, and in some cases intermittent; those who were attacked later from the time of its first appearance, had the disorder more severely, and were longer ill. The most general form was that of a catarrh, and the great debility which followed its attack, and the rapidity with which the symptoms came on, seem to have been its most remarkable characters.

It appeared that very small distances sometimes made great alterations both in the character and universality of the disease; even where there was no apparent difference with respect to situation: and it was observed by several, that the inhabitants of low situations were more generally and more violently affected, than the inhabitants of high ones.

the Influenza of 1782 and the disorder which has lately been so prevalent. Almost universally there was more or less disturbed action of the bowels in the late Epidemic. R. P.

SECTION IV.

Communications from Correspondents.

HAVING circulated the following Queries relative to the progress, nature, and treatment of the prevailing Epidemic, I have been favoured with answers from various parts of the country, which I here insert in the order in which they were received.

1. At what time did the Influenza first show itself in your town and neighbourhood?

2. Whether it is *generally* accompanied with symptoms which denote high inflammatory action?

3. What proportion, in your practice, the pneumonic cases have borne to those in which there was no apparent inflammation in any part of the chest?

4. Whether the pains of the limbs, of which almost all these patients complain, have not more affinity to those which are often observed in typhus and other malignant fevers, than they have to the pains which accompany acute rheumatism?

5. Whether there be not generally more or less disturbed action of the stomach and bowels? And what appearances are most common in the fæces?

6. Whether the complaint does not frequently go off, without any considerable expectoration?

7. Whether it appears to be infectious? And if so, how soon the contagion operates upon a person that has been exposed to it?

8. What are the appearances usually observed on opening the bodies of those who have died of this disorder?

9. Whether, even in those cases in which there is pneumonic inflammation, the patients bear copious and repeated blood-letting, as they do in a simple pleurisy or peripneumony? or, Whether the degree of inflammatory action which takes place in this disorder does not frequently yield to the combined operation of antimonials, calomel and blisters, without the aid of the lancet?

10. Whether profuse and long continued perspirations, procured by keeping the patients warm in bed and giving them strong sudorifics, are not generally hurtful? And, on the contrary, Whether, after the second or third day, keeping the patient out of bed and under a cool temperature, does not expedite the recovery?

11. Whether copious evacuations by stool, and the repeated employment of calomel, do not universally afford great relief?

12. Whether full doses of opium, given on the first days of the attack, with a view to appease the cough, are not manifestly hurtful?

Observations on the Catarrhal Epidemic, by Dr. John Johnstone of Birmingham. Dated April 3d, 1803.

The Influenza began to show itself in our neighbourhood in the beginning of the second week of March. On the 12th it was very general. I have seen few cases in which the symptoms of inflammation were very brisk; the pulse, though rapid, was generally small and weak, and the strength was always remarkably impaired. The slightest and most frequent cases were those in which there were pains of the head and back, and eye-balls, with sneezings, and copious discharge from the eyes and nose, and trifling cough. The lungs have been seriously affected, for the most part, in those persons attacked by the epidemic who were before subject to asthma and winter cough; and in those cases the tongue has been very foul, and the expectoration very copious. In some cases the wheezing and dyspnœa have been as troublesome as in convulsive asthma. I have seen two cases in which the complaint took a malignant turn, and both died. One a stout man, 40 years old, was first seized with the disorder as it affects the chest; cough, wheezing, and some mucous expectoration. After the eighth day of the complaint, these symptoms suddenly vanished; his head became affected, his eyes grew red and glaring, his tongue

black, his bowels swelled, and he died on the twelfth day. The other, a child 6 years old, had a slight attack of the affection of the eyes and nostrils, which apparently went off without leaving any other bad effects than weakness and lowness. Last Sunday she ate a hearty dinner and was cheerful, but complained of her head, and in the night was very feverish.—I found her dying on Monday night, her throat inflamed, her eyes red and glaring; after death the neck became black in a few hours, the stomach green, and purple blotches broke out on the thighs; the body was not opened. In all cases, even the slightest, the debility and depression have been very great.

The severe affections of the lungs have been obstinate, but I have known only three die under these circumstances. One a young man who had been bled in the beginning of his complaint—and two old asthmatics. In the severe cases the expectoration has been purulent, rarely bloody. The urine very small in quantity, and excessively high coloured. The bowels costive, sometimes griped, but in general little affected.

I have employed bleeding only twice, both times with advantage. In the mild cases, nitre and antimonial powder in small doses have easily removed the complaint. In general, keeping

open the body by the mildest means, moderately, and using plenty of dilution, avoiding too much heat, appeared the most useful plan.—When the dyspnœa was urgent, 3 or 4 grains of ipecacuanha, twice or thrice daily. Nitre in pectoral decoction. Opiates hurtful in the beginning, and the same of hot remedies and wine.—Calomel early in small doses useful, but violent purging the contrary. I have seen little good from blisters; and from endeavouring to keep up the perspiration in too great a degree, in one case the fever was exceedingly aggravated, and the mouth and throat covered with aphthæ. The disease has generally gone off with some degree of perspiration, oftentimes very profuse. Squills I have found an useful remedy in most circumstances of the cough. Since the beginning I have seen upwards of 300 persons affected with Influenza, most of them with the slight affection, not one in twenty with severe dyspnœa and cough. Five have died. I calculate that every 6th or 7th person in this town and neighbourhood is in some sort affected. It now declines.

This is the general result of the experience of myself and my brother.*

* Dr. Edward Johnstone.

Observations on the same Epidemic, by Dr. Bowles, Physician to the General Military Hospital at Gosport. Dated April 4th, 1803.

1st. The disease made its first appearance in this vicinity towards the latter end of February last, and still continues to affect such as escaped the disorder at that time.

2d. The symptoms did not, generally, appear to be of that class which denote *high* inflammatory action.

3d. The proportion of those affected with pneumonic symptoms, were, as nearly as I can recollect, about seven in nine.

4th. The pains in the limbs, &c. had not a strict resemblance to those which accompany the Rheumatismus Acutus.

5th. The stomach, in general, betrayed the usual symptoms of anorexia, but the bowels for the most part were costive, and the fæces exhibited no particular appearance.

6th. In most cases the complaint went off without *considerable* expectoration, but was generally attended with a certain degree of that discharge.

7th. I have not been able, in any case, satisfactorily to trace the disorder from one individual to another, in such a manner as to establish its being of an infectious nature properly so called.—

It has nevertheless been extremely general, and those attacked by it, within the walls of this Hospital, were certainly affected independent of contagion or communication with others already diseased.

8th. Having seen no case which proved fatal, I can say nothing with regard to appearances on dissection.

9th. I have not employed venesection in any case, having always succeeded in relieving the local symptoms in the chest by neutral salts, antimonials, Dover's powder, and occasional emetics.—The lancet has not been decidedly indicated in any case which has fallen under my observation, and was frequently forbidden by the early occurrence of delirium and weakened circulation.

10th. I never attempted the stronger sudorifics for any continuance, but found a sensible advantage from the use of mild diaphoretics and a cool temperature.

11th. The employment of Calomel with Pulv. Antim. where the heat and increased action were considerable, never failed to produce the speediest relief.

12th. I never employed opium alone in full doses, but in the form of Pulv. Ipecac. comp. given every night, or every other night, according to circumstances, and adding Calomel

to prevent costiveness. I have never seen it aggravate the symptoms in any stage of the disorder. I have only further to add, that the answers and observations above written, have been drawn from a very considerable number of cases which have fallen under my care in this vicinity.

*Extract of a Letter from Dr. Joseph Mason Cox,
of Overn Hill, near Bristol, dated April 5th
1803.*

“ In my own case, which was very tedious, (a considerable degree of cough, with restless nights, languor and want of appetite continuing even beyond the 20th day) there were few marks of inflammatory action. The complaint did not appear to be infectious. The pains in the limbs had more affinity to those which accompany typhus and other malignant fevers, than to those of acute rheumatism. An emetic of the antimonial kind, taken soon after the first appearance, almost constantly relieved; and, in some instances, entirely removed the complaint. The accompanying cough seemed to arise more from increased irritability of the bronchial vessels than from pneumonic inflammation, and seldom required bleeding. Continued and profuse perspirations were manifestly hurtful, and opiates in general disagreed. Cool air and drinks mitigated the symptoms. Blisters were very useful.”

Observations on the same Epidemic, by Mr. Jukes of Stourport, communicated in a Letter from Dr. A. Philips Wilson of Worcester. Dated April 8th, 1803.*

1. The Influenza made its appearance in this place and neighbourhood the beginning of March.

2. It is very rarely accompanied with symptoms which denote high inflammatory action, for of from 150 to 200 patients, I have only seen one case that admitted of general blood-letting.

3. The pneumonic cases have borne a large proportion to those in which there was no apparent inflammation in any part of the chest; about three-fourths of the whole.

* SIR,

I should sooner have acknowledged the receipt of your letter, but did not consider myself capable of answering your inquiries in a satisfactory manner, as in most of the cases I have seen, the Epidemic was attended with inflammation of the lungs, or had terminated in nervous fever; physicians being seldom consulted here except in serious cases, a great number of which indeed we have had lately. I therefore put your letter into the hands of one of the best informed men I know, Mr. Jukes, surgeon and apothecary at Stourport, who is in extensive practice, has seen many cases of the prevailing Epidemic in all its forms, and being a man of observation, is well calculated to answer your queries. The foregoing letter I received this day.

I am with respect, sir, your obedient servant,

A. PHILIPS WILSON.

4. The pains of the limbs have certainly a greater affinity to those which are often observed in typhus and other febrile diseases of a malignant nature, than to the pains which accompany acute rheumatism.

5. The action of the stomach and bowels has not in general been very much disturbed, and I have seen but few cases of spontaneous vomiting or purging.

6. Where there has been any pneumonic affection, the complaint has very rarely gone off without considerable expectoration; and if it has been protracted beyond a few days, it has generally terminated in nervous fever.

7. The disease does not appear to be infectious; 5 or 6 persons in a family have been seized within 24 or 30 hours of the same time, where there had been no communication whatever with a diseased person.

8. I have not examined any subject after death, and have only seen three cases in which it has proved fatal, all of whom were between 60 and 70 years of age; and who, early in the complaint, had all the symptoms of *Peripneumonia Notha*.

9. A single blood-letting has been attended with manifest injury, and the inflammatory action which takes place has yielded to the operation of calomel, antimon. tartarisat. and opium, pulv. ipecac. and blisters.

10. Long continued perspirations, especially when procured by heating measures, have generally been hurtful; and the cure has been accelerated by getting out of bed daily after the first 2 or 3 days, and living in air of a moderate temperature.

11. Calomel, given at the beginning of the disease to procure évacuation by stool, has been eminently serviceable.

12. I have had no experience of full doses of opium given at the commencement of the disease; but it has been highly serviceable in small doses combined with antimon. tartar. or ipecacuanha.

Extract of a Letter from Doctor Hunter of York.

Dated April 12th, 1803.

“ The Epidemic that prevails so much in London and Bath, has as yet made little or no impression in this city, or neighbourhood. I myself have had it, and a few others of my acquaintance, but the symptoms were so mild as to render the disease hardly distinguishable from a common cold, further than by occasioning a greater degree of muscular debility.”

Observations on the same, by Dr. Trevor Jones of Litchfield. Dated April 12th, 1803.

1. The Influenza appeared in this neighbourhood about the tenth of last month.

2. I saw very few instances that denoted much inflammatory action.

3. The proportion of cases that were attended with more pain than usual was very inconsiderable.

4. The pains of the limbs bore no affinity to rheumatism, and were generally attended with weariness and lassitude.

5. Some patients suffered from nausea, painful distension of the abdomen and diarrhoea. The fæces were dark coloured, and appeared to have much bile. In some I observed a yellowness of the eye.

6. The disease sometimes went off without much expectoration; but in many instances it was very copious.

7. I could not trace the disease to infection.

8. I had no patient that died of the disease.

9. I ordered no patient to be bled, but gave calomel and rhubarb at bed-time for two, three, or four nights successively, in the first attack; as the urgency of the symptoms required.

10. I have not tried profuse nor long continued sweating, but suffered all my patients to sit up more or less every day in a temperature most agreeable to their own feeling, and advised them to avoid excess of bed-clothes, &c.

11. Large evacuations by stool I avoided as

much as possible; for in two of the first cases I was called to, tartarized antimony purged upwards and downwards very violently, without any abatement of the disease, but evidently with a loss of strength. Moderate and daily evacuations by stool (as mentioned in No. 9) were always attended with great relief.

12. Early in the disease, I never tried opium.

The practice I found the most successful was, in the early stage of the complaint, to give calomel and rhubarb every night, with saline draughts in the day. Constant sipping of tepid barley water, and to live upon aqueous food. When the fever and urgent symptoms were abated, if there remained dyspnœa and a dry cough I ordered lac ammoniac. &c. When the expectoration was very copious and thin, ten or fifteen drops of the tincture of digitalis were given twice or thrice a day, and half a grain of opium at bed-time. In few instances was the quantity of opium increased.

Observations on the same by Mr. Du Gard, of Shrewsbury. Dated April 17th, 1803.

1. The first case of the Epidemic Catarrhal Fever or Influenza, that I perceived, was on the 20th of February, in a little boy at the public grammar school in this town; he was ill a week. His bedfellow was not infected by

him, nor were any of the boys (who amounted to 20) in the same room; nor did any one in the house become attacked with the disease till this boy had been well eleven days, at which time, five or six were taken ill, and the same number daily till four fifths of the school were affected.

At a ladies boarding-school, the Influenza first shewed itself on the 11th of March, and in the course of the two and three following days between forty and fifty young ladies sickened. In a week they were all well again.

At a thread and linen manufactory about a quarter of a mile from any part of the town, a house is appropriated for the dwelling of about two hundred apprentice girls.—The Influenza appeared there on the 16th of March, when six or eight were attacked: the disease continued eight or nine days, in which time not more than eighteen had it.

2. The Influenza here has been generally accompanied with symptoms which denote inflammatory action.

3. About two thirds of the patients that I have attended have complained of an affection of the chest.

4. The pains of the limbs resemble much more those of synochus than those of acute rheumatism.

5. Most of the patients that I have seen, in all about 158, have had some disturbed action of the stomach and bowels. Many have had diarrhœa, others vomiting, and some constipation.

6. In young subjects the complaint has generally gone off with very little expectoration. In the middle-aged, there has frequently been an inability to take a full inspiration: and many old people have died from suffocation occasioned by the copious secretion of mucus.

In some bad cases the patients have looked very livid for a few days, and yet have recovered.

7. The Influenza appears to me to be infectious, and the contagion to operate in about twenty-four hours. ✓

8. — — — — —

9. In some cases, where the pneumonic inflammation has run high, blood-letting has been advantageously employed. In a few instances it has been necessary to repeat the operation, and in some elderly patients, the cake on the surface of the blood has curled in at the edges, quite as much as I ever remember to have seen it in pleurisy. In general, however, the disorder has yielded to the operation of calomel, antimony, and blisters, * without the aid of the lancet.

* Inflaming the skin very much with mustard cataplasms has seemed to produce a better effect than blisters, the applica-

10. Gentle perspirations after an emetic were useful. Profuse sweats kept up by heat were universally injurious.

11. Copious evacuations by stools, and the repeated employment of calomel, uniformly did good.

12. Opium given at first, in large doses, or indeed at all, seems to have done great mischief, which I have had opportunities of witnessing repeatedly. At the decline of the disease in elderly people, where the breathing has been quick, five drops of laudanum with aqua kali, repeated every four or six hours, have been of great service. In these cases the short breathing I have supposed to be owing to debility and deficient absorption in the lungs.

In the concluding part of his letter, Mr. Du Gard mentions, that at the time when the Influenza was so prevalent among the human species, dogs and horses were observed to be violently disordered.

Extract of a Letter from Mr. Carpenter of Lyme Regis, dated April 22d, 1803.

With the exception of a few cases, the Influenza (which appeared here in the beginning of March) has not assumed a true peripneumonic tion being repeated when the oppression at the præcordia was great.

form in this place. A large proportion of patients, the aged in particular, have been affected with pains about the margin of the chest, the ribs, and under the scapulæ, that seemed at first to indicate the use of the lancet. These symptoms, however, (which were accompanied with dejected countenance, prostration of strength, and quick undulating pulse) yielded to antispasmodics and cooling diaphoretics.

The most usual appearances were increased heat, pain under the sternum, sometimes in one spot, sometimes along its whole extent, with a catarrhal affection of the membrane lining the nose, fauces, and bronchia, heaviness of the head, weight over the eyes, pains under the pectoral muscles darting into the arms, and great weariness of the limbs. When I have been called in the very beginning, it has rarely resisted the use of saline cathartics (such as vitriolated magnesia) joined with tartarized antimony. This medicine commonly produces more or less vomiting of a viscid phlegm, and several stools; after which the symptoms so much abate, that little more is required for accomplishing the cure, than to keep the patient upon a proper diet.

The hot sweating plan I have seen constantly injurious; and three or four cases have been fatal in a neighbouring village, where the country people have obstinately persisted in it.—Large

doses of opium also hurtful. In many cases this medicine increased the delirium; in others it aggravated the catarrhal symptoms. But I have used successfully small doses of the Tinct. Opii. Camphorata at night, joined with the antimonial wine and spirit of nitrous æther.

Answers to the proposed Queries, by Dr. Forester of Derby. Dated April 26, 1803.

1. Towards the end of February.
2. The symptoms at the commencement do generally denote inflammatory action.
3. The greater number of patients are affected with cough, pains in the chest or side, and dyspnoea.
4. The pains in the loins and limbs seem to hold a middle place between those which attend the early stages of typhus and other malignant fevers, and the pain in acute rheumatism, though perhaps inclining to the former.
5. The stomach is a good deal affected, and a peculiar uneasy sensation in the region of that viscus is pretty generally complained of.
6. From the violent effects in a few cases produced by ordinary doses of antimonials, the stomach has appeared to be in a state of great sensibility.
7. I cannot speak to this question.

8. Nor to this.

9. In almost all cases of any violence V. S, to a moderate degree is indicated, and has been used with evident advantage when not too long delayed. Where the disease has run on to Peripneumony or Pleurisy, repeated blood-letting has been found indispensable.

10. Diaphoretics are very serviceable; but long continued and profuse sweating, by exhausting the strength, would seem to be injurious. Cool and fresh air, regulated according to circumstances, about the 3d or 4th day, appears to expedite recovery.

11. Relief is experienced from calomel and rhubarb repeated so that each dose may give three or four motions, or from other mild cathartics.

12. Opium so given is manifestly injurious, so indeed are hot white wine whey, and other stimuli.

THE END.

